

Sertifikaat

REPUBLIC VAN SUID-AFRIKA

Certificate

PATENTKANTOOR



ZA00/22

PATENT OFFICE

DEPARTEMENT VAN HANDEL
EN NYWERHEID

REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF TRADE
AND INDUSTRYHiermee word gesertifiseer dat
This is to certify that

REC'D 14 MAR 2000


WIPO PCT

#3
11-5-01
DRS

- 1) South African Patent Application No. 99/1099 accompanied by a Provisional Specification was filed at the South African Patent Office on the 11 February 1999, in the name of Africa Outdoors ACS (Proprietary) Limited in respect of an invention entitled: "Firearm".
- 2) The photocopy attached hereto is a true copy of the provisional specification and drawings filed with South African Patent Application No. 99/1099.

PRIORITY
DOCUMENTSUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH RULE 17.1(a) OR (b)BETORIA in die Republiek van Suid-Afrika, hierdie
in the Republic of South Africa, this16th dag van
day of

February 2000


Registrateur van Patente
Registrar of Patents

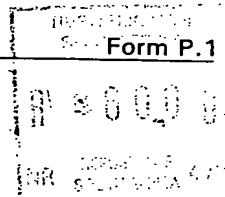
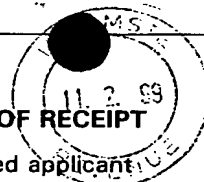
D.M. KISCH INC. Johannesburg

REPUBLIC OF SOUTH AFRICA
PATENTS ACT, 1978

APPLICATION FOR A PATENT AND ACKNOWLEDGEMENT OF RECEIPT

(Section 30 (1) - Regulation 22)

The grant of a patent is hereby requested by the undermentioned applicant on the basis of the present application filed in duplicate.



PATENT APPLICATION NO.		
21	01	991099

AGENT'S REFERENCE
P99/77442

FULL NAME(S) OF APPLICANT(S)

71	AFRICA OUTDOORS ACS (PROPRIETARY) LIMITED
----	---

ADDRESS(ES) OF APPLICANT(S)

	11 Bloekom Avenue NIGEL 1490
--	------------------------------------

TITLE OF INVENTION

54	FIREARM
	THE APPLICANT CLAIMS PRIORITY AS SET OUT ON THE ACCOMPANYING FORM P.2. The earliest priority claimed is
	THIS APPLICATION IS FOR A PATENT OF ADDITION TO PATENT APPLICATION NO. 21 01
	THIS APPLICATION IS A FRESH APPLICATION IN TERMS OF SECTION 37 AND BASED ON APPLICATION NO. 21 01

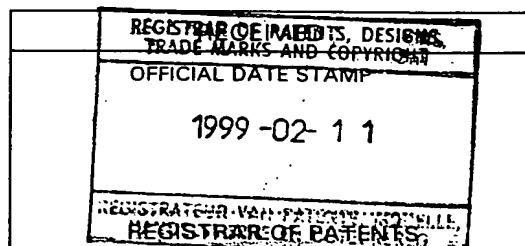
THIS APPLICATION IS ACCOMPANIED BY :

X	1	A copy of a provisional or one copy of a complete specification of 5 pages.
	2	Drawings of sheets.
	3	Publication particulars and abstract (Form P.8. in duplicate).
	4	A copy of Figure of the drawings for the abstract.
	5	An assignment of invention.
	6	Certified priority document(s) (State number).
	7	Translation of priority document(s).
	8	An assignment of priority rights.
	9	A copy of Form P.2 and specification of S.A. Patent Application No. 21 01
	10	A declaration and power of attorney on Form P.3.
	11	Request for ante-dating on Form P.4.
	12	Request for classification on Form P.9.
	13	

DATED THIS 17th DAY OF February 19 99

Patent Attorney for the Applicant(s)

ADDRESS FOR SERVICE	
74	D.M. KISCH INC. 66 Wierda Road East Wierda Valley Sandton, Johannesburg



D.M. KISCH INC. , Johannesburg

*Patent Attorneys & Trademark Agents
Attorneys & Notaries*

Form P.6

REPUBLIC OF SOUTH AFRICA

PATENTS ACT, 1978.

PROVISIONAL SPECIFICATION

(Section 30 (1) - Regulation 27)

PATENT APPLICATION NO.			LODGING DATE.		AGENT'S REFERENCE
21	01	991099	22	11-02-1999	P99/77442

FULL NAME(S) OF APPLICANT(S)	
71	AFRICA OUTDOORS ACS (PROPRIETARY) LIMITED

FULL NAME(S) OF INVENTOR(S)	
72	NICOLAAS CORNELIUS VAN ZYL

TITLE OF INVENTION	
54	FIREARM

This invention relates to a firearm device.

991099

According to the present invention a firearm device comprises

- **a firearm;**
- **safety means for preventing the firearm from being fired by an unauthorized person; and**
- **information storage means for recording and storing at least one aspect of the group consisting of images, sound, time and location of the firearm.**

The firearm may comprise any conventional firearm or any other firearm for firing a projectile. The firearm may comprise a rifle but preferably it comprises a hand gun. The firearm may include an electronic fire mechanism.

The safety means may comprise a mechanical means.

In a preferred embodiment the safety means may comprise an information carrier or gathering means, and a processing means for processing the information received, and allowing firing of the firearm to take place only if the information received complies with certain requirements.

The information carrier may comprise a card or similar device. In use the card may have information recorded thereon in respect of, for example, personal physical information of the authorized user such as skin prints or the like. The card may also include details thereon regarding the license of the firearm.

The safety means may also include reading means for reading information on the information carrier.

The information gathering means may comprise means for gathering certain physical information from the person to use the firearm. The gathering means may comprise means for recording information such as skin prints (particularly fingerprints), voice, retina scanning, DNA identification or the like.

The processing means may also include a memory means for storing information therein. In use the processing means may compare information received with information on the memory means and only allow firing to take place if the information corresponds.

In one example the authorized users thumbprint may be stored on the card and it may be stored on the memory means. In use firing will only be allowed by the processor if the thumbprint or the card is the same as that

on the memory and the same as that received by the information gathering means which in use takes a thumb print of the person holding the firearm.

The safety mechanism may also be adapted in order that the firearm can be de-activated to prevent firing, in a similar way that a cell phone is blocked. This can be used to de-activate the firearm when it gets stolen, or when the license expires (if firearm licenses are made valid for a certain period of time only). The firearm can also be programmed to be operational for a specific period of time, for example when the authorized person (such as a policeman) is on duty.

A remote controllable device may also be installed for controlling the firearm device from a remote position.

The information storage means may comprise a camera such as a CCD camera for recording and storing images and/or; a microphone for recording sound and/or; a timepiece for recording time and/or; a GPS for recording position in the form of geographical co-ordinates. Preferably the information storage means comprises all the above.

The camera may be mounted to face along the barrel defined by the firearm, thereby allowing it to record an image in the direction in which the barrel is facing.

The time piece may comprise any suitable timepiece for providing time and date. The timepiece may comprise a real time clock.

The firearm device may also include trigger means for triggering the information storage means to record and store. Preferably the information storage means is so triggered when the trigger of the firearm is pulled.

It will be appreciated that in this way, when a shot is being fired, an image (along the barrel), sound, time and date and the position of the firearm can be recorded at the time of firing. It is believed that this will result in more responsible use of firearms and reduce crime. For example the firearm device may be programmed to be operable for only a certain period of time, and in order to continue use, the firearm will have to be taken to the authorities which can then download information stored on the firearm before allowing it to be used again.

DATED THIS THE 11th DAY OF FEBRUARY 1999.



D. M. KISCH INC.
PATENT ATTORNEYS FOR APPLICANT

THIS PAGE BLANK (USPTO)